OWNER'S MANUAL

ELIXIR POWER CONVERTER / CHARGER

MODELS : ELX-12

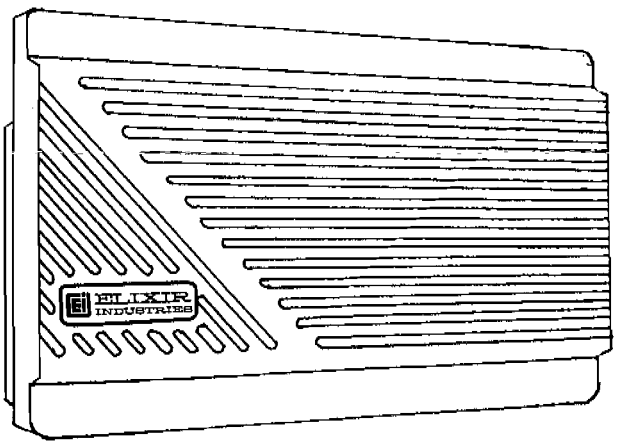
ELX-20

ELX-25

ELX-30

ELX-20-240

ELX-25-240



ELIXIR INDUSTRIES

640 Collins Road Elkhart, IN 46516 USA

SAFETY PRECAUTIONS

When operating your Elixir power converter, basic safety precautions should always be followed to reduce the potential risk of fire, electric shock and/or injury to persons, including the following :

1. Read this owner s manual thoroughly before operating your converter.
2. Do not allow any objects or liquid into the openings of your converter.
3. Do not place any flammable materials such as gasoline near your converter.
4. Do not cover or obstruct ventilating opening of your converter. Overheating may result.
5. To reduce the risk of fire or electric shock, do not remove any service covers. No user's serviceable parts are inside. Repair should be done by your dealer's authorized personnel only.
6. If you have any questions or comments about this product, please contact your local dealer for assistance.

FEATURES

Your Elixir power converter installed in your RV is the heart of the DC electrical system. The power converter system carries full ETL, ETL-C approval and has been FCC Class B Certified. We are confident that it will provide you outstanding performance for many years. Features of your Elixir power converter are:

1. **Stable DC Power**
   Your converter provides stable DC power to operate the 12 volt DC lights and motor in your RV whether a battery is installed or not.
2. **Variable Speed Control Cooling Fan**
   Variable speed control cooling fan operates only when your converter is at high load. The cooling fan will stop or just turn at low speed when power demand is low (especially during sleeping hours).
3. **Overload Protection**
   If your power demand (including lights, motor and battery charge) exceeds your converter output rating and voltage drops to 12.5V, the audible alarm will sound. Simply reduce your power demand by turning off the last item that triggered the alarm, the alarm will stop and your converter will function again.

4. Low Reverse Current
Battery installed in your RV will not exhaust quickly during storage.

5. Short Circuit Protection
Your converter will shut down automatically if a short circuit is detected. Once short circuit is corrected, the unit will function again.

6. Reverse Polarity Protection
Your converter is equipped with a reverse polarity protection fuse (DC output fuse OUT4) that will be blown if the battery is not connected correctly.

7. Constant Voltage
Your converter is designed with constant voltage of 13.5~13.6 volts at no-load and >13.1 volts at full-load to ensure trouble-free service of all 12 volt DC appliances.

8. Fast Battery Charging
For faster charging, turn the converter on and reduce the DC appliance load on the unit.

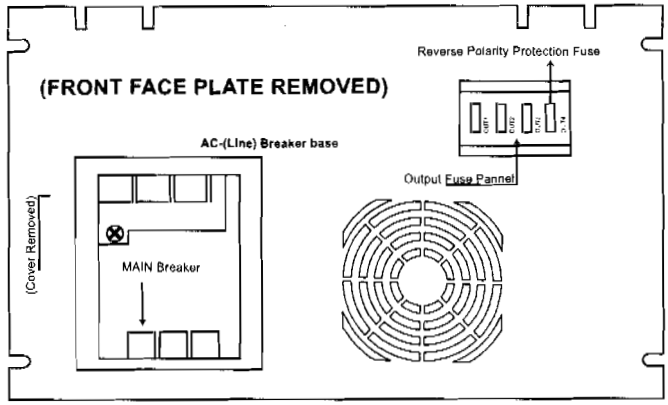
9.Durable Performance
Your converter will provide you outstanding performance for many years.

INSTALLATION

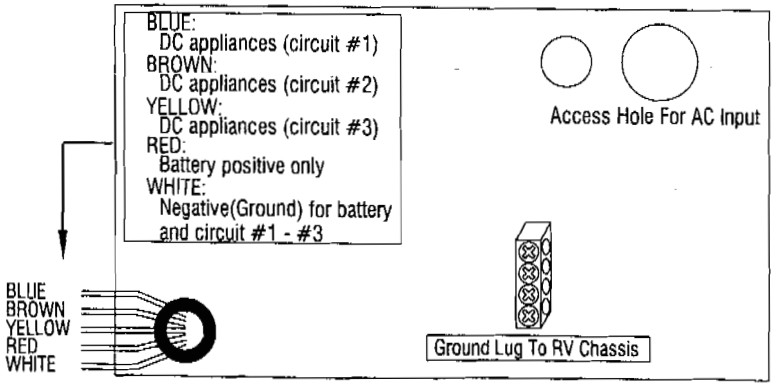
1. Horizontal mount only in a vertical plane with the bottom edge of the front face plate one inch above the floor (for door opening clearance). Install your converter firmly on the mounting surface by using standard fasteners.
2. Do not mount the converter in the same compartment as batteries or flammable materials such as gasoline. Avoid high levels of dust, dirt or moisture.
3. If the reverse polarity protection fuse (DC output fuse OUT4) is blown during installation, check to see that the battery has been connected properly before replacing the fuses. Replace the fuses only with the same type and rating as original fuses. Using other or larger fuses could result in damage to the converter.
4. Connect DC output red wire to positive lead of battery only.
5. DC fuse holders for replaceable automotive-type fuses are located on the upper right corner of the converter front face plate. Maximum fuse size and circuit identification are provided to the left of the fuse holder.
6. For proper operation, your converter must be grounded to the chassis or frame. A ground lug is provided on the back side of your converter.

WIRING DIAGRAM

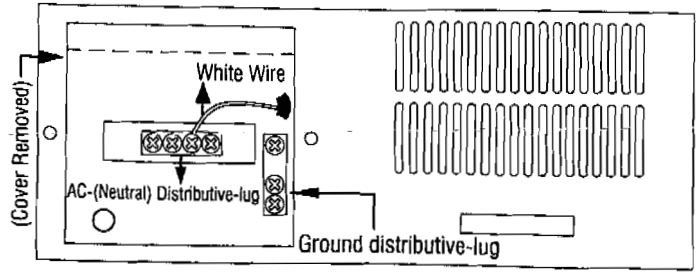
Front View



Back View



Side View



DC OUTPUT WIRING TO RV CIRCUIT

- **BLUE WIRE** : Positive 12 volts for DC appliances (Circuit #1)
- **BROWN WIRE** : Positive 12 volts for DC appliances (Circuit #2)
- **YELLOW WIRE** : Positive 12 volts for DC appliances (Circuit #3)
- **RED WIRE** : Positive lead of 12 volts battery only
- **WHITE WIRE** : Negative of battery and DC appliances

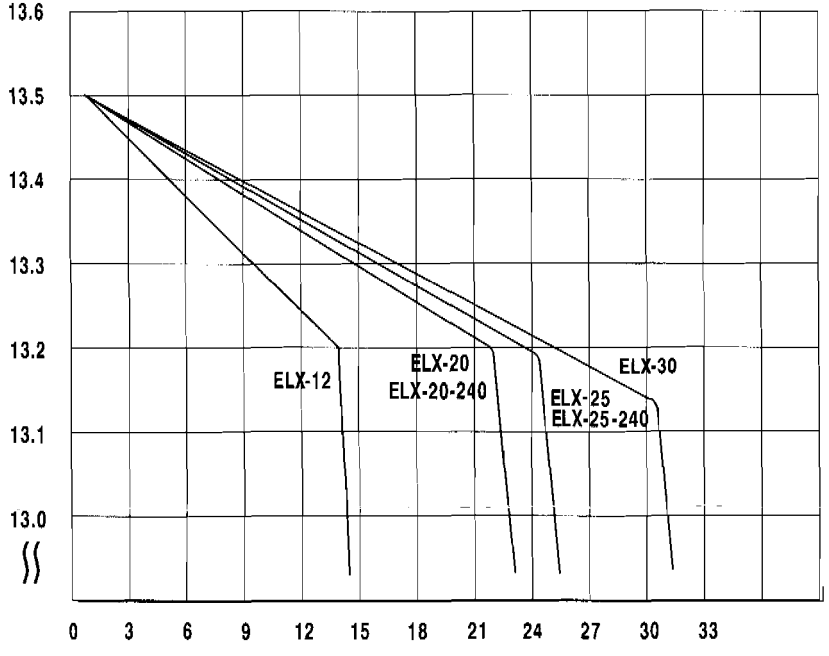
OPERATION

1. When 120VAC (240VAC for ELX-20-240 and ELX-25-240) is connected to your converter via commercial power generation, your converter will automatically provide power to operate 12VDC appliances (lights, motors) in your RV. When 120VAC (240VAC for ELX-20-240 and ELX-25-240) disconnects from your converter, the battery installed in your RV will automatically provide necessary power to operate DC appliances.
2. When 120VAC (240VAC for ELX-20-240 and ELX-25-240) is connected, your converter will sense and provide primary power to the DC demand source, while providing remaining current to the battery charge. Once the RV battery is fully charged, your converter will reduce battery charge to a maintenance rate until it falls below "full charge"again.
3. For faster battery charge, turn on the converter and reduce DC appliance load.
4. If your power demand (lights, motors and battery charge) exceeds your converter amperage, and voltage drops to 12.5V, the audible alarm will sound. Simply reduce the DC demand by turning off the last item of DC appliance which triggered the alarm, the alarm will stop and your converter will function again.
5. AC distribution panel contains the AC breakers for each of the 120VAC (240VAC for ELX-20-240 and ELX-25-240) branch circuit of the RV. To turn AC breaker ON or OFF, switch breaker-handle position as indicated by visual ON/OFF. To reset a tripped breaker, switch breaker-handle to OFF then ON.
6. DC distribution panel contains the 12VDC fuses for each of the 12VDC load circuits of the RV. The DC distribution panel is designed for blade type fuses. If a fuse blows, do not replace with a fuse larger than indicated on the label.

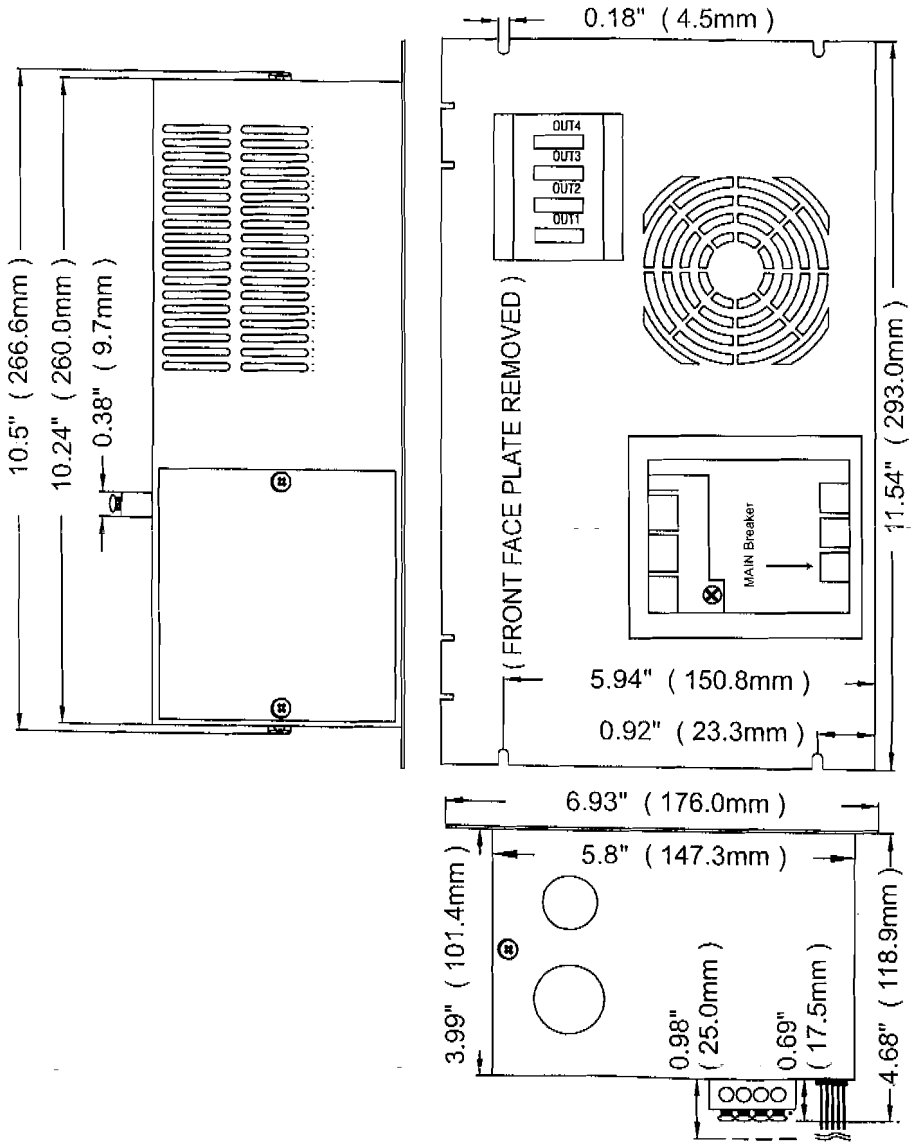
SPECIFICATIONS

Model Number	AC Input			DC Output		Dimensions	Cut-Out	Faceplate	Weight
	Volt	HZ	AMP	Volt	Amp	H × W × L			
ELX-12	100-120	50-60	6	13.1-13.5	12	7.13"×11.87" ×5.67"	6.25"× 10.58"	7.13" × 11.87"	6.0 pounds
ELX-20	100-120	50-60	8	13.1-13.5	20	7.13"×11.87" ×5.67"	6.25"× 10.58"	7.13" × 11.87"	6.6 pounds
ELX-25	100-120	50-60	10	13.1-13.5	25	7.13"×11.87" ×5.67"	6.25"× 10.58"	7.13" × 11.87"	6.7 pounds
ELX-30	100-120	50-60	10	13.1-13.5	30	7.13"×11.87" ×5.67"	6.25"× 10.58"	7.13" × 11.87"	6.8 pounds
ELX-20 -240	200-240	50-60	4	13.1-13.5	20	7.13"×11.87" ×5.67"	6.25"× 10.58"	7.13" × 11.87"	6.6 pounds
ELX-25 -240	200-240	50-60	5	13.1-13.5	25	7.13"×11.87" ×5.67"	6.25"× 10.58"	7.13" × 11.87"	6.7 pounds

OUTPUT LOAD CURVE



DIMENSIONS


0.18" (4.5mm)
OUT4
OUT3
OUT2
OUT1
MAIN Breaker
(FRONT FACE PLATE REMOVED)
10.5" (266.6mm)
10.24" (260.0mm)
0.38" (9.7mm)
11.54" (293.0mm)
5.94" (150.8mm)
0.92" (23.3mm)
6.93" (176.0mm)
5.8" (147.3mm)
3.99" (101.4mm)
0.98" (25.0mm)
0.69" (17.5mm)
4.68" (118.9mm)

WARRANTY

Elixir Industries warrants this converter to be free from defects in materials or workmanship under normal use and service for two years from the date of retail purchase and limits the remedies to repair or replacement, at its discretion, of any defective part or assembly. This warranty is limited to original owner only and within the continental limits of the United States and Canada. This warranty is extended specifically for and is limited to recreational vehicle application.

If a problem should occur with your converter within the first 24 months of purchase, please contact a dealer that handles warranties on your brand of RV.

Any implied warranties of merchantability and fitness for intended use are limited in duration unless applicable State Law provides otherwise. You may have other rights as specified by each individual state.

This warranty does not apply to the following:

- Any damage of converter caused by misuse, improper installation or accident.
- Installation of converter in a commercial vehicle.
- Any converter whose serial number has been defaced, altered or removed.
- Any converter that has been repaired or altered by an unauthorized person.

WARRANTY REFERENCE RECORD

For future Warranty reference, record the following:

Date of RV. Purchase: _____

Converter Serial Number: _____